GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: August 15, 2002, 08:29:09 ; Search time 211.29 Seconds
(without alignments)
2681.536 Million cell updates/sec

Title: US-09-622-613A-14
Perfect score: 330
Sequence: 1 cagaactgggctactttcca.....ctggtatcggtcgttgcccg 330

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1736436 seqs, 858457221 residues

Total number of hits satisfying chosen parameters: 3472872

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_032802:*
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23: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
24: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	330	100.0	330	20	AAZ08130	Rana catesbeiana o
	2	330	100.0	333	20	AAZ08131	Recombinant Met(-1
	3	327	99.1	330	20	AAZ08134	Recombinant RaCOR1
	4	327	99.1	333	20	AAZ08135	Recombinant Met(-1
	5	326.8	99.0	330	20	AAZ08132	Recombinant RaCOR1
	6	326.8	99.0	333	20	AAZ08133	Recombinant Met(-1
	7	95	28.8	95	20	AAZ08144	PCR primer-3 for s
	8	94.4	28.6	96	20	AAZ08148	PCR primer-2 for a
	9	92.8	28.1	96	20	AAZ08141	PCR primer-1 for s
	10	91.2	27.6	96	20	AAZ08147	PCR primer-1 for a
	11	85	25.8	97	20	AAZ08139	PCR primer-1 for s
	12	71.8	21.8	86	20	AAZ08140	PCR primer-2 for s
	13	50	15.2	318	20	AAZ19767	Recombinant frog O
	14	39.2	11.9	19205	22	AAS34685	Human DNA for a no
	15	39	11.8	436	22	ABA44186	Human breast cell
	16	39	11.8	436	22	ABA54635	Human foetal liver
	17	39	11.8	436	22	ABA24419	Probe #2885 for ge
	18	39	11.8	436	22	AAK02925	Human brain expres
	19	39	11.8	436	22	AAK28369	Human bone marrow
	20	39	11.8	436	22	AAI12933	Probe #2866 for ge
	21	39	11.8	436	22	AAI34296	Probe #2982 used t
	22	39	11.8	436	22	AAI02854	Probe #2845 used t
	23	38.2	11.6	315	18	AAT94959	R. pipiens recombi
	24	38.2	11.6	318	18	AAT94958	R. pipiens recombi
	25	38.2	11.6	321	18	AAT94954	R. pipiens recombi
	26	38.2	11.6	333	18	AAT94957	R. pipiens recombi
	27	38.2	11.6	336	18	AAT94955	R. pipiens recombi
	28	38.2	11.6	753	18	AAT94972	R. pipiens recombi
	29	38.2	11.6	768	18	AAT94973	R. pipiens recombi
	30	38.2	11.6	1065	18	AAT94971	R. pipiens recombi
	31	38.2	11.6	1065	18	AAT94963	R. pipiens recombi
	32	38.2	11.6	1065	18	AAT94967	R. pipiens recombi
	33	38.2	11.6	1074	18	AAT94968	R. pipiens recombi
	34	38.2	11.6	1098	18	AAT94970	R. pipiens recombi
	35	38.2	11.6	1137	18	AAT94964	R. pipiens recombi
c	36	38	11.5	5997	12	AAQ12188	Odontoglossum ring
c	37	38	11.5	6597	14	AAQ38106	ORSV cDNA. Odonto
	38	37.6	11.4	312	20	AAZ08124	Rana pipiens liver
	39	37.6	11.4	312	20	AAZ08125	Recombinant RaPLR1
	40	37.6	11.4	312	20	AAZ08128	Recombinant RaPLR1
	41	37.6	11.4	315	20	AAZ08126	Recombinant Met(-1
	42	37.6	11.4	315	20	AAZ08127	Recombinant Met(-1
	43	37.6	11.4	315	20	AAZ08129	Recombinant Met(-1
	44	37.6	11.4	2855	20	AAZ08136	Rana pipiens ribon
	45	37.4	11.3	2574	19	AAV26293	Recombinant botuli

ALIGNMENTS

RESULT 1
AAZ08130
ID AAZ08130 standard; cDNA; 330 BP.
XX
AC AAZ08130;
XX
DT 25-JAN-2000 (first entry)
XX
DE Rana catesbeiana oocyte ribonuclease (RaCOR1) encoding cDNA.
XX
KW Rana catesbeiana oocyte ribonuclease; RaCOR1; covalently bound; CD22;
KW LL2 antibody; ligand binding moiety; cancerous B cell; Kaposi's Sarcoma;
KW human chorionic gonadotrophin; hCG; recombinant ribonuclease; bullfrog;
KW signal peptide; cytotoxic fusion protein; cancer; autoimmune disease;
KW RNase; ss.
XX
OS Rana catesbeiana.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mat_peptide 1..330
FT /*tag= a
FT /product= "RaCOR1"
FT /note= "Rana catesbeiana oocyte ribonuclease"
XX
PN WO9950398-A2.
XX
PD 07-OCT-1999.
XX
PF 26-MAR-1999; 99WO-US06641.
XX
PR 27-MAR-1998; 98US-0079751.

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XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28872.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Claim 20; Page 62; 71pp; English.
XX
CC   The present sequence is a synthetic cDNA encoding Rana catesbeiana oocyte
CC   ribonuclease (RaCOR1), modified for expression in E. coli. Carboxy
CC   terminal end of RaCOR1 has a covalently bound ligand binding moiety,
CC   which can be a LL2 antibody directed against CD22 on cancerous B cells or
CC   human chorionic gonadotrophin (hCG) effective against Kaposi's Sarcoma
CC   cells. Recombinant ribonucleases can be expressed in bacteria without an
CC   N-terminal methionine due to the presence of a signal peptide that is
CC   cleaved by bacteria. The soluble expression of ribonuclease allows the
CC   proteins to be fused in-frame with ligand binding moieties to form
CC   cytotoxic fusion proteins. They can be used for treatment of cancer and
CC   autoimmune diseases.
XX
SQ   Sequence 330 BP; 82 A; 95 C; 56 G; 97 T; 0 other;

  Query Match             100.0%;  Score 330;  DB 20;  Length 330;
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  Matches  330;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy      61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120
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Db      61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120

Qy     121 atctcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctg 180
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Qy     181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240
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Db     181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240

Qy     241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300
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Db     241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300

Qy     301 gttcatttcgctggtatcggtcgttgcccg 330
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Db     301 gttcatttcgctggtatcggtcgttgcccg 330


RESULT   2
AAZ08131
ID   AAZ08131 standard; cDNA; 333 BP.
XX
AC   AAZ08131;
XX
DT   25-JAN-2000  (first entry)
XX
DE   Recombinant Met(-1) RaCOR1 encoding cDNA.
XX
KW   Recombinant Met(-1) Rana catesbeiana oocyte ribonuclease; RaCOR1; CD22;
KW   RNase; covalently bound; LL2 antibody; ligand binding moiety;
KW   cancerous B cell; Kaposi's sarcoma; human chorionic gonadotrophin; hCG;
KW   signal peptide; recombinant ribonuclease; cytotoxic fusion protein;
KW   cancer; bullfrog; autoimmune disease; ss.
XX
OS   Rana catesbeiana.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mat_peptide     1..333
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FT                   /product= "Recombinant Met(-1) RaCOR1"
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FT   misc_feature    1..3
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FT                   /note= "Additional ATG codon not found in RaCOR1"
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28873.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Disclosure; Page 63; 71pp; English.
XX
CC   The present sequence is a cDNA encoding recombinant Rana catesbeiana
CC   oocyte ribonuclease (RaCOR1) with Met at position 1. Carboxy terminal end
CC   of recombinant RaCOR1 has a covalently bound ligand binding moiety, which
CC   can be a LL2 antibody directed against CD22 on cancerous B cells or human
CC   chorionic gonadotrophin (hCG) effective against Kaposi's sarcoma cells.
CC   Recombinant ribonucleases can be expressed in bacteria without an N-
CC   terminal methionine due to the presence of a signal peptide that is
CC   cleaved by bacteria. The soluble expression of ribonuclease allows the
CC   proteins to be fused in-frame with ligand binding moieties to form
CC   cytotoxic fusion proteins. They can be used for treatment of cancer and
CC   autoimmune diseases.
XX
SQ   Sequence 333 BP; 83 A; 95 C; 57 G; 98 T; 0 other;

  Query Match             100.0%;  Score 330;  DB 20;  Length 333;
  Best Local Similarity   100.0%;  Pred. No. 4.4e-92;
  Matches  330;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60
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Db       4 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 63

Qy      61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120
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Qy     121 atctcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctg 180
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Qy     181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240
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Db     184 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 243

Qy     241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300
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Db     244 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 303

Qy     301 gttcatttcgctggtatcggtcgttgcccg 330
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Db    304 gttcatttcgctggtatcggtcgttgcccg 333


RESULT   3
AAZ08134
ID   AAZ08134 standard; cDNA; 330 BP.
XX
AC   AAZ08134;
XX
DT   25-JAN-2000  (first entry)
XX
DE   Recombinant RaCOR1 Gln1Ser encoding cDNA.
XX
KW   Recombinant Rana catesbeiana oocyte ribonuclease; RaCOR1 Gln1Ser;
KW   covalently bound; LL2 antibody; ligand binding moiety; CD22; RNase;
KW   cancerous B cell; Kaposi's sarcoma; human chorionic gonadotrophin; hCG;
KW   signal peptide; recombinant ribonuclease; cytotoxic fusion protein;
KW   cancer; bullfrog; autoimmune disease; ss.
XX
OS   Rana catesbeiana.
OS   Synthetic.
XX
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FT                   /note= "Rana catesbeiana oocyte ribonuclease"
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FT                   /*tag=  b
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28877.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Disclosure; Page 67; 71pp; English.
XX
CC   The present sequence is a cDNA encoding recombinant Rana catesbeiana
CC   ribonuclease (RaCOR1) with Gln1Ser. Carboxy terminal end of recombinant
CC   RaCOR1 has a covalently bound ligand binding moiety, which can be a LL2
CC   antibody directed against CD22 on cancerous B cells or human chorionic
CC   gonadotrophin (hCG) effective against Kaposi's sarcoma cells. Recombinant
CC   ribonucleases can be expressed in bacteria without an N-terminal
CC   methionine due to the presence of a signal peptide that is cleaved by
CC   bacteria. The soluble expression of ribonuclease allows the proteins to
CC   be fused in-frame with ligand binding moieties to form cytotoxic fusion
CC   proteins. They can be used for treatment of cancer and autoimmune
CC   diseases.
XX
SQ   Sequence 330 BP; 82 A; 95 C; 55 G; 98 T; 0 other;


  Query Match             99.1%;  Score 327;  DB 20;  Length 330;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-91;
  Matches  327;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db       4 aactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacactatc 63

Qy      64 atggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatcatc 123
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Qy     124 tcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctgtct 183
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Qy     184 actactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgcccg 243
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Qy     244 tactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccggtt 303
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Qy     304 catttcgctggtatcggtcgttgcccg 330
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RESULT   4
AAZ08135
ID   AAZ08135 standard; cDNA; 333 BP.
XX
AC   AAZ08135;
XX
DT   25-JAN-2000  (first entry)
XX
DE   Recombinant Met(-1) RaCOR1 Gln1Ser encoding cDNA.
XX
KW   Recombinant Met(-1) Rana catesbeiana oocyte ribonuclease Gln1Ser; RaCOR1;
KW   CD22; covalently bound; LL2 antibody; ligand binding moiety; RNase;
KW   cancerous B cell; Kaposi's sarcoma; human chorionic gonadotrophin; hCG;
KW   signal peptide; recombinant ribonuclease; cytotoxic fusion protein;
KW   cancer; bullfrog; autoimmune disease; ss.
XX
OS   Rana catesbeiana.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mat_peptide     1..333
FT                   /*tag=  a
FT                   /product= "Recombinant Met(-1) RaCOR1 Gln1Ser"
FT                   /note= "Rana catesbeiana oocyte ribonuclease"
FT   misc_feature    1..3
FT                   /*tag=  b
FT                   /note= "Additional ATG codon not found in RaCOR1"
FT   old_sequence    replace(4..6, CAG)
FT                   /*tag=  c
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28878.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Disclosure; Page 68; 71pp; English.
XX
CC   The present sequence is a cDNA encoding recombinant Rana catesbeiana
CC   oocyte ribonuclease (RaCOR1) with Met at position 1 and Gln2Ser. Carboxy
```

```
CC   terminal end of recombinant RaCOR1 has a covalently bound ligand binding
CC   moiety, which can be a LL2 antibody directed against CD22 on cancerous B
CC   cells or human chorionic gonadotrophin (hCG) effective against Kaposi's
CC   sarcoma cells. Recombinant ribonucleases can be expressed in bacteria
CC   without an N-terminal methionine due to the presence of a signal peptide
CC   that is cleaved by bacteria. The soluble expression of ribonuclease
CC   allows the proteins to be fused in-frame with ligand binding moieties to
CC   form cytotoxic fusion proteins. They can be used for treatment of cancer
CC   and autoimmune diseases.
XX
SQ   Sequence 333 BP; 83 A; 95 C; 56 G; 99 T; 0 other;


  Query Match             99.1%;  Score 327;  DB 20;  Length 333;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-91;
  Matches  327;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      4 aactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacactatc 63
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Qy     64 atggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatcatc 123
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Qy    124 tcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctgtct 183
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Qy    184 actactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgcccg 243
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Qy    304 catttcgctggtatcggtcgttgcccg 330
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RESULT   5
AAZ08132
ID   AAZ08132 standard; cDNA; 330 BP.
XX
AC   AAZ08132;
XX
DT   25-JAN-2000  (first entry)
XX
DE   Recombinant RaCOR1 Met22Leu Met57Leu encoding cDNA.
XX
KW   Recombinant Rana catesbeiana oocyte ribonuclease; covalently bound;
KW   RaCOR1 Met22Leu Met57Leu; LL2 antibody; ligand binding moiety; CD22;
KW   cancerous B cell; Kaposi's sarcoma; human chorionic gonadotrophin; hCG;
KW   signal peptide; recombinant ribonuclease; cytotoxic fusion protein;
KW   cancer; bullfrog; autoimmune disease; RNase; ss.
XX
OS   Rana catesbeiana.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mat_peptide     1..330
FT                   /*tag=  a
FT                   /product= "Recombinant RaCOR1 Met22Leu Met57Leu"
FT                   /note= "Rana catesbeiana oocyte ribonuclease"
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FT                   /*tag=  b
FT   old_sequence    replace(169..171, ATG)
FT                   /*tag=  c
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28874.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Disclosure; Page 64; 71pp; English.
XX
CC   The present sequence is a cDNA encoding recombinant Rana catesbeiana
CC   oocyte ribonuclease (RaCOR1) with Met22Leu Met57Leu. Carboxy terminal end
CC   of recombinant RaCOR1 has a covalently bound ligand binding moiety, which
CC   can be a LL2 antibody directed against CD22 on cancerous B cells or human
CC   chorionic gonadotrophin (hCG) effective against Kaposi's sarcoma cells.
CC   Recombinant ribonucleases can be expressed in bacteria without an N-
CC   terminal methionine due to the presence of a signal peptide that is
CC   cleaved by bacteria. The soluble expression of ribonuclease allows the
CC   proteins to be fused in-frame with ligand binding moieties to form
CC   cytotoxic fusion proteins. They can be used for treatment of cancer and
CC   autoimmune diseases.
XX
SQ   Sequence 330 BP; 80 A; 97 C; 56 G; 97 T; 0 other;


  Query Match             99.0%;  Score 326.8;  DB 20;  Length 330;
  Best Local Similarity   99.4%;  Pred. No. 4.3e-91;
  Matches  328;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60

Qy     61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120
          ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 atcctggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120

Qy    121 atctcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctg 180
          |||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db    121 atctcttctgctactactgttaaagctatctgcactggtgttatcaacctgaacgttctg 180

Qy    181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240

Qy    241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300

Qy    301 gttcatttcgctggtatcggtcgttgcccg 330
          |||||||||||||||||||||||||||||
Db    301 gttcatttcgctggtatcggtcgttgcccg 330


RESULT   6
AAZ08133
ID   AAZ08133 standard; cDNA; 333 BP.
XX
AC   AAZ08133;
XX
DT   25-JAN-2000  (first entry)
XX
DE   Recombinant Met(-1) RaCOR1 Met22Leu Met57Leu encoding cDNA.
XX
KW   Recombinant Met(-1) Rana catesbeiana ribonuclease Met22Leu Met57Leu;
```

```
KW   RaCOR1; CD22; covalently bound; LL2 antibody; ligand binding moiety;
KW   cancerous B cell; Kaposi's sarcoma; human chorionic gonadotrophin; hCG;
KW   signal peptide; recombinant ribonuclease; cytotoxic fusion protein;
KW   cancer; bullfrog; RNase; autoimmune disease; ss.
XX
OS   Rana catesbeiana.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   mat_peptide     1..333
FT                   /*tag=  a
FT                   /product= "Recombinant Met(-1) RaCOR1 Met22Leu Met57Leu"
FT                   /note= "Rana catesbeiana oocyte ribonuclease"
FT   misc_feature    1..3
FT                   /*tag=  b
FT                   /note= "Additional ATG codon not found in native RaCOR1"
FT   old_sequence    replace(67..69, ATG)
FT                   /*tag=  c
FT   old_sequence    replace(172..174, ATG)
FT                   /*tag=  d
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
DR   P-PSDB; AAY28876.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Disclosure; Page 65; 71pp; English.
XX
CC   The present sequence is a cDNA encoding recombinant Rana catesbeiana
CC   oocyte ribonuclease (RaCOR1) with Met at position 1, Met23Leu and
CC   Met58Leu. Carboxy terminal end of recombinant RaCOR1 has a covalently
CC   bound ligand binding moiety, which can be a LL2 antibody directed against
CC   CD22 on cancerous B cells or human chorionic gonadotrophin (hCG)
CC   effective against Kaposi's sarcoma cells. Recombinant ribonucleases can
CC   be expressed in bacteria without an N-terminal methionine due to the
CC   presence of a signal peptide that is cleaved by bacteria. The soluble
CC   expression of ribonuclease allows the proteins to be fused in-frame with
CC   ligand binding moieties to form cytotoxic fusion proteins. They can be
CC   used for treatment of cancer and autoimmune diseases.
XX
SQ   Sequence 333 BP; 81 A; 97 C; 57 G; 98 T; 0 other;


  Query Match            99.0%;  Score 326.8;  DB 20;  Length 333;
  Best Local Similarity   99.4%;  Pred. No. 4.3e-91;
  Matches  328;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      4 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 63

Qy     61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120
          ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     64 atcctggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 123

Qy    121 atctcttctgctactactgttaaagctatctgcactggtgttatcaacatgaacgttctg 180
          |||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db    124 atctcttctgctactactgttaaagctatctgcactggtgttatcaacctgaacgttctg 183

Qy    181 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    184 tctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccgtgc 243

Qy    241 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    244 ccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtacccg 303

Qy    301 gttcatttcgctggtatcggtcgttgcccg 330
          |||||||||||||||||||||||||||||
Db    304 gttcatttcgctggtatcggtcgttgcccg 333


RESULT   7
AAZ08144
ID   AAZ08144 standard; DNA; 95 BP.
XX
AC   AAZ08144;
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-3 for synthesising 3' half of RaCOR1 gene.
XX
KW   PCR primer; ribonuclease; RNase; RaCOR1; Rana catesbeiana; mutation;
KW   recombinant RNase; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Example 5; Page 41; 71pp; English.
XX
CC   The present sequence is a PCR primer comprising the 3' half of
CC   ribonuclease (RaCOR1) gene from Rana catesbeiana. It is used along with
CC   other primers to synthesise the 3' half of RNase with mutations resulting
CC   in recombinant RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 95 BP; 21 A; 29 C; 19 G; 26 T; 0 other;


  Query Match            28.8%;  Score 95;  DB 20;  Length 95;
  Best Local Similarity   100.0%;  Pred. No. 9.6e-20;
  Matches   95;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    226 actccgcgtccgtgcccgtactcttctcgtactgaaactaactacatctgcgttaaatgc 285
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 actccgcgtccgtgcccgtactcttctcgtactgaaactaactacatctgcgttaaatgc 60

Qy    286 gaaaaccagtacccggttcatttcgctggtatcgg 320
          |||||||||||||||||||||||||||||||||||
Db     61 gaaaaccagtacccggttcatttcgctggtatcgg 95


RESULT   8
AAZ08148
ID   AAZ08148 standard; DNA; 96 BP.
XX
AC   AAZ08148;
```

```
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-2 for assembling mutated RaCOR1 gene.
XX
KW   PCR primer; assemble; Rana catesbeiana ribonuclease gene; RaCOR1; RNase;
KW   mutated; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Example 5; Page 41; 71pp; English.
XX
CC   The present sequence is a PCR primer, used along with another primer
CC   to assemble mutated Rana catesbeiana ribonuclease (RaCOR1) gene
CC   resulting in RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 96 BP; 17 A; 32 C; 17 G; 30 T; 0 other;


  Query Match             28.6%;  Score 94.4;  DB 20;  Length 96;
  Best Local Similarity   99.0%;  Pred. No. 1.5e-19;
  Matches   95;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy     148 atctgcactggtgttatcaacatgaacgttctgtctactactcgtttccagctgaacact 207
           ||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db       1 atctgcactggtgttatcaacctgaacgttctgtctactactcgtttccagctgaacact 60

Qy     208 tgcactcgtacttctatcactccgcgtccgtgcccg 243
           |||||||||||||||||||||||||||||||||||
Db      61 tgcactcgtacttctatcactccgcgtccgtgcccg 96


RESULT   9
AAZ08141
ID   AAZ08141 standard; DNA; 96 BP.
XX
AC   AAZ08141;
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-1 for synthesising 3' half of RaCOR1 gene.
XX
KW   PCR primer; ribonuclease; RNase; RaCOR1; Rana catesbeiana; mutation;
KW   recombinant RNase; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Example 5; Page 41; 71pp; English.
XX
CC   The present sequence is a PCR primer comprising the 3' half of
CC   ribonuclease (RaCOR1) gene from Rana catesbeiana. It is used along with
CC   other primers to synthesise the 3' half of RNase with mutations resulting
CC   in recombinant RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 96 BP; 18 A; 31 C; 17 G; 30 T; 0 other;


  Query Match             28.1%;  Score 92.8;  DB 20;  Length 96;
  Best Local Similarity   97.9%;  Pred. No. 4.6e-19;
  Matches   94;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy     148 atctgcactggtgttatcaacatgaacgttctgtctactactcgtttccagctgaacact 207
           |||||||||||||||  ||||||||||||||||||||||||||||||||||||||||||
Db       1 atctgcactggtgttactaacatgaacgttctgtctactactcgtttccagctgaacact 60

Qy     208 tgcactcgtacttctatcactccgcgtccgtgcccg 243
           |||||||||||||||||||||||||||||||||||
Db      61 tgcactcgtacttctatcactccgcgtccgtgcccg 96


RESULT  10
AAZ08147
ID   AAZ08147 standard; DNA; 96 BP.
XX
AC   AAZ08147;
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-1 for assembling mutated RaCOR1 gene.
XX
KW   PCR primer; assemble; Rana catesbeiana ribonuclease gene; RaCOR1; RNase;
KW   mutated; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases  -
XX
PS   Example 5; Page 41; 71pp; English.
XX
CC   The present sequence is a PCR primer, used along with another primer
CC   to assemble mutated Rana catesbeiana ribonuclease (RaCOR1) gene
CC   resulting in RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 96 BP; 30 A; 28 C; 16 G; 22 T; 0 other;
```

```
  Query Match            27.6%;  Score 91.2;  DB 20;  Length 96;
  Best Local Similarity   96.9%;  Pred. No. 1.4e-18;
  Matches   93;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60

Qy     61 atcatggacaacaacatctacatcgttggtggtcag 96
          ||| || | |||||||||||||||||||||||||||
Db     61 atcctgcagaacaacatctacatcgttggtggtcag 96


RESULT  11
AAZ08139
ID   AAZ08139 standard; DNA; 97 BP.
XX
AC   AAZ08139;
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-1 for synthesising 5' half of RaCOR1 gene.
XX
KW   PCR primer; ribonuclease; RNase; RaCOR1; Rana catesbeiana; mutation;
KW   recombinant RNase; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    22
FT                   /*tag= a
FT                   /note= "Unknown additional base"
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases -
XX
PS   Example 5; Page 40; 71pp; English.
XX
CC   The present sequence is a PCR primer comprising the 5' half of
CC   ribonuclease (RaCOR1) gene from Rana catesbeiana. It is used along with
CC   other primers to synthesise the 5' half of RNase with mutations resulting
CC   in recombinant RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 97 BP; 31 A; 27 C; 16 G; 22 T; 1 other;


  Query Match            25.8%;  Score 85;  DB 20;  Length 97;
  Best Local Similarity   99.0%;  Pred. No. 1.2e-16;
  Matches   96;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy      1 cagaactgggctactttccag-cagaaacatatcatcaacactccgatcatctgcaacac 59
          |||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||
Db      1 cagaactgggctactttccagncagaaacatatcatcaacactccgatcatctgcaacac 60

Qy     60 tatcatggacaacaacatctacatcgttggtggtcag 96
          |||||||||||||||||||||||||||||||||||||
Db     61 tatcatggacaacaacatctacatcgttggtggtcag 97


RESULT  12
AAZ08140
ID   AAZ08140 standard; DNA; 86 BP.
XX
AC   AAZ08140;
XX
DT   25-JAN-2000  (first entry)
XX
DE   PCR primer-2 for synthesising 5' half of RaCOR1 gene.
XX
KW   PCR primer; ribonuclease; RaCOR1; Rana catesbeiana; mutation; RNase;
KW   recombinant RNase; ss.
XX
OS   Synthetic.
OS   Rana catesbeiana.
XX
PN   WO9950398-A2.
XX
PD   07-OCT-1999.
XX
PF   26-MAR-1999;   99WO-US06641.
XX
PR   27-MAR-1998;   98US-0079751.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Newton DL,  Rybak SM;
XX
DR   WPI; 1999-610847/52.
XX
PT   New recombinant ribonucleases, used for killing target cells, e.g. for
PT   treating cancers, viral infections or autoimmune diseases -
XX
PS   Example 5; Page 40; 71pp; English.
XX
CC   The present sequence is a PCR primer comprising the 5' half of
CC   ribonuclease (RaCOR1) gene from Rana catesbeiana. It is used along with
CC   other primers to synthesise the 5' half of RNase with mutations resulting
CC   in recombinant RNase with Met22Leu and Met57Leu.
XX
SQ   Sequence 86 BP; 19 A; 20 C; 16 G; 31 T; 0 other;


  Query Match            21.8%;  Score 71.8;  DB 20;  Length 86;
  Best Local Similarity   96.6%;  Pred. No. 1.3e-12;
  Matches   84;  Conservative    0;  Mismatches    2;  Indels    1;  Gaps    1;

Qy     79 tacatcgttggtggtcagtgcaaacgtgttaacactttcatcatctcttctgctactact 138
          |||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db      1 tacatcgttggtggtcagtgcaaacgtgttaacactttcatcatctc-tctgctactact 59

Qy    139 gttaaagctatctgcactggtgttatc 165
          |||||| ||||||||||||||||||||
Db     60 gttaaacgtatctgcactggtgttatc 86


RESULT  13
AAZ19767
ID   AAZ19767 standard; cDNA; 318 BP.
XX
AC   AAZ19767;
XX
DT   01-DEC-1999  (first entry)
XX
DE   Recombinant frog Onconase cDNA.
XX
KW   Ribonuclease; protein synthesis; inhibition; cancer; cytotoxic; ds.
XX
OS   Rana pipiens.
XX
```

```
FH   Key             Location/Qualifiers
FT   CDS             1..318
FT                   /*tag= a
FT                   /product= "Recombinant frog Onconase"
XX
PN   WO9946389-A1.
XX
PD   16-SEP-1999.
XX
PF   11-MAR-1999;   99WO-US04252.
XX
PR   11-MAR-1998;   98US-0077557.
XX
PA   (IMMU-) IMMUNOMEDICS INC.
XX
PI   Goldenberg DM,  Hansen H,  Leung S;
XX
DR   WPI; 1999-551416/46.
DR   P-PSDB; AAY39400.
XX
PT   A new recombinant Onconase used to treat, e.g. colon cancer -
XX
PS   Example 1; Fig 1; 42pp; English.
XX
CC   This sequence represents recombinant frog Onconase cDNA. Onconase has
CC   ribonuclease and anti-tumour activity. The cDNA was produced via PCR
CC   (using primers AAZ19768-Z19769) of two synthetic DNAs whose sequences
CC   encoded most of the N-terminal or the C-terminal amino acids of mature
CC   Onconase. The two PCR products generated encoded either the N-terminal
CC   54 amino acids (minus the initial methionine) or the C-terminal 51 amino
CC   acids, and  were ligated in frame at an NruI site. The cDNA was then
CC   subcloned into a vector e.g., pBluescript, where the ATG initiation
CC   codon was ligated to the cDNA. After expression in E. coli, the
CC   recombinant protein was purified. The initial N-formyl methionine was
CC   cleaved off and the now N-terminal glutamate residue cyclised to form an
CC   N-terminal pyroglutamate. The pyroglutamate residue forms part of the
CC   phosphate binding pocket of Onconaseand is essential for both
CC   ribonuclease and anti-tumour activity. Onconase is a 12 kD ribonuclease
CC   which causes cell death as a result of potent inhibition of protein
CC   synthesis by a mechanism involving inactivation of cellular RNA. It is
CC   not inhibited by mammalian placental ribonuclease inhibitor, which may
CC   explain its enhanced cytotoxicity relative to mammalian enzymes. It has
CC   anti-tumour activity against a variety of solid tumours e.g, colon or
CC   pancreatic cancers, and can be used alone or in combination with other
CC   anti-cancer agents such as tamoxifen. When used as an anti-tumour agent,
CC   Onconase can be conjugated to a marker which targets it to a specific
CC   cell type.
XX
SQ   Sequence 318 BP; 99 A; 65 C; 71 G; 83 T; 0 other;


  Query Match             15.2%;  Score 50;  DB 20;  Length 318;
  Best Local Similarity   54.2%;  Pred. No. 1.2e-05;
  Matches  179;  Conservative    0;  Mismatches  130;  Indels   21;  Gaps    3;

Qy      1 cagaactgggctactttccagcagaaacatatcatcaacactccgatcatctgcaacact 60
          ||| | |||   || || ||| ||||||||||||  || || |         |  |
Db      4 caggattggctaacgtttcagaagaaacatatcacgaatacac---------gagatgta 54

Qy     61 atcatggacaacaacatctacatcgttggtggtcagtgcaaacgtgttaacactttcatc 120
            |   ||||| |  || | |    |     ||| || ||   |   || || || ||
Db     55 gactgcgacaatataatgtctacgaatctgtttcactgtaaggataagaatacctttata 114

Qy    121 atctcttctgctactactgttaaagctatctgcactggtgttatc---aacatgaacgtt 177
            | |    |     |||| || |||||||| |  ||  |||||   |  | ||||||
Db    115 tacagtcggccagagcctgtaaaggctatctgtaaaggcattatcgcgagtaagaacgtg 174

Qy    178 ctgtctactactcgtttccagctgaacacttgcactcgtacttctatcactccgcgtccg 237
          ||| ||||| |    ||| | |||  |  ||||| |   |||||          || ||
Db    175 ctgactacttccgagttctatctgtccgattgcaatgtgacttca---------cggccc 225

Qy    238 tgcccgtactcttctcgtactgaaactaactacatctgcgttaaatgcgaaaaccagtac 297
          |||   ||          |     |||||| |  | ||||| |  ||||| ||||||

Db    226 tgcaaatataagctgaagaaaagcactaacaaattttgcgtaacttgcgagaaccaggct 285

Qy    298 ccggttcatttcgctggtatcggtcgttgc 327
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Db    286 cctgtacatttcgttggagtcgggagctgc 315


RESULT  14
AAS34685
ID   AAS34685 standard; DNA; 19205 BP.
XX
AC   AAS34685;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Human DNA for a novel foetal antigen, SEQ ID No 2109.
XX
KW   Human; foetal tissue antigen; ds; antiinflammatory; neuroprotective;
KW   immunomodulator; cardiovascular; cytostatic; nephrothropic;
KW   cardiovascular; autoimmune disease; rheumatoid arthritis;
KW   hyperproliferative disorder; breast neoplasm; cancer;
KW   cardiovascular disorder; cardiac arrest; cerebrovascular disorder;
KW   cerebral ischaemia; angiogenesis; nervous system disorder;
KW   Alzheimer's disease; infection; ocular disorder; corneal infection;
KW   wound healing; epithelial cell proliferation; food additive.
XX
OS   Homo sapiens.
XX
PN   WO200155312-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01321.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
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PR 01-SEP-2000; 2000US-0229345.
PR 05-SEP-2000; 2000US-0229509.
PR 05-SEP-2000; 2000US-0229513.
PR 06-SEP-2000; 2000US-0230437.
PR 06-SEP-2000; 2000US-0230438.
PR 08-SEP-2000; 2000US-0231242.
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PR 08-SEP-2000; 2000US-0231244.
PR 08-SEP-2000; 2000US-0231413.
PR 08-SEP-2000; 2000US-0231414.
PR 08-SEP-2000; 2000US-0232080.
PR 08-SEP-2000; 2000US-0232081.
PR 12-SEP-2000; 2000US-0231968.
PR 14-SEP-2000; 2000US-0232397.
PR 14-SEP-2000; 2000US-0232398.
PR 14-SEP-2000; 2000US-0232399.
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PR 14-SEP-2000; 2000US-0232401.
PR 14-SEP-2000; 2000US-0233063.
PR 14-SEP-2000; 2000US-0233064.
PR 14-SEP-2000; 2000US-0233065.
PR 21-SEP-2000; 2000US-0234223.
PR 21-SEP-2000; 2000US-0234274.
PR 25-SEP-2000; 2000US-0234997.
PR 25-SEP-2000; 2000US-0234998.
PR 26-SEP-2000; 2000US-0235484.
PR 27-SEP-2000; 2000US-0235834.
PR 27-SEP-2000; 2000US-0235836.
PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
PR 29-SEP-2000; 2000US-0236368.
PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
PR 02-OCT-2000; 2000US-0237038.
PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241221.
PR 20-OCT-2000; 2000US-0241785.
PR 20-OCT-2000; 2000US-0241786.
PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
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PR 08-NOV-2000; 2000US-0246478.
PR 08-NOV-2000; 2000US-0246523.
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PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
PR 08-NOV-2000; 2000US-0246528.
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PR 08-NOV-2000; 2000US-0246609.
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PR 17-NOV-2000; 2000US-0249207.
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PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
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PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
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PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-488782/53.
XX
PT New polynucleotides and polypeptides for diagnosing, treating,
PT preventing or prognosing e.g. diseases or disorders of the nervous,
PT musculoskeletal, excretory, gastrointestinal, reproductive, and
PT respiratory systems -
XX
PS Disclosure; SEQ ID No 2109; 642pp; English.
XX
CC The invention relates to novel nucleic acids encoding novel human foetal
CC antigens. The nucleic acids and proteins are used to prevent, treat (e.g.
CC by gene therapy) or ameliorate a medical condition in e.g. humans, mice,
CC rabbits, goats, horses, cats, dogs, chickens or sheep. They
CC are also used in diagnosing a pathological condition or susceptibility
CC to a pathological condition. The antibodies to the antigens can also
CC be used in alleviating symptoms associated with the disorders and in
CC diagnostic immunoassays e.g. radioimmunoassays or enzyme linked
CC immunosorbent assays (ELISA). Disorders which are diagnosed or treated
CC include autoimmune diseases e.g. rheumatoid arthritis,
CC hyperproliferative disorders e.g. neoplasms of the breast or liver,
CC cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders
CC e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g.
CC Alzheimer's disease, infections caused by bacteria, viruses and fungi
CC and ocular disorders e.g. corneal infection. The polypeptides can also
CC be used to aid wound healing and epithelial cell proliferation, to
CC prevent skin aging due to sunburn, to maintain organs before
CC transplantation, for supporting cell culture of primary tissues, to
CC regenerate tissues and in chemotaxis. The polypeptides can also be used
CC as a food additive or preservative to increase or decrease storage
CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
CC minerals, cofactors and other nutritional components. Numerous
CC examples of diseases and disorders treated by the nucleic acids and
CC proteins are given in the specification. The present sequence
CC is a genomic DNA fragment from a gene encoding a foetal antigen of the

Query Match 11.9%; Score 39.2; DB 22; Length 19205;
Best Local Similarity 50.5%; Pred. No. 0.14;
Matches 95; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

Qy 100 aaacgtgttaacactttcatcatctcttctgctactactgttaaagctatctgcactggt 159
Db 957 ataaatgctatcagattcctattttgtcaagatgctgtagtcacactttaaattatgagg 1016

Qy 160 gttatcaacatgaacgttctgtctactactcgtttccagctgaacacttgcactcgtact 219

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Db   1017 ctcattatcataatcattctgatccaaacaagttttctcccttacccttagactctcaca 1076

Qy    220 tctatcactccgcgtccgtgcccgtactcttctcgtactgaaactaactacatctgcgtt 279
          ||| |   || |  |      | |||| ||    |  ||||| |   |||  ||   ||
Db   1077 cctacctaccctctcctaaatacatactatttatattttgaaaatttttactgctctttt 1136

Qy    280 aaatgcga 287
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Db   1137 aactgcga 1144


RESULT  15
ABA44186
ID   ABA44186 standard; DNA; 436 BP.
XX
AC   ABA44186;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human breast cell single exon nucleic acid probe #2881.
XX
KW   Human; microarray; single exon probe; gene expression; breast;
KW   disease; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157271-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00662.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-496933/54.
XX
PT   New spatially-addressable set of single exon nucleic acid probes,
PT   useful for measuring gene expression in sample derived from human
PT   breast, comprises number of single exon nucleic acid probes  -
XX
PS   Claim 1; SEQ ID NO 2881; 327pp + sequence listing; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human breast and BT 474 cells. The method involves contacting
CC   the probes with a collection of detectably labelled nucleic acids
CC   derived from mRNA of human breast, and then measuring the label
CC   bound to each probe of the microarray. The probes are useful for
CC   verifying the expression of regions of genomic DNA predicted to
CC   encode proteins. They are useful for gene discovery, and for
CC   determining predisposition and/or prognosing breast disease. Gene
CC   expression analysis is useful for assessing the toxicity of chemical
CC   agents on cells. The microarray of this invention presents a far greater
CC   diversity of probes for measuring gene expression, with far less bias
CC   than expressed sequence tag microarrays. The method is suitable for
CC   rapid production of functional information from genomic sequence. The
CC   present sequence is a single exon nucleic acid probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 436 BP; 137 A; 144 C; 15 G; 140 T; 0 other;
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  Query Match             11.8%;  Score 39;  DB 22;  Length 436;
  Best Local Similarity   47.4%;  Pred. No. 0.035;
  Matches  117;  Conservative    0;  Mismatches  130;  Indels    0;  Gaps    0;

Qy      34 atcaacactccgatcatctgcaacactatcatggacaacaacatctacatcgttggtggt 93
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Db    112 atcatcactaccatcactactaatactatcattaccactactattaccattaccacgact 171

Qy      94 cagtgcaaacgtgttaacactttcatcatctcttctgctactactgttaaagctatctgc 153
             |    |  || ||| | || |||  || || ||| | || | |   |||
Db    172 atcattactactactaccacctccaccattactactactaatgctatcattactactact 231

Qy     154 actggtgttatcaacatgaacgttctgtctactactcgtttccagctgaacacttgcact 213
           ||  | | || |  |       ||   | | ||||  |         | |||    |||
Db    232 gcttctataattactactcctactcctaccattactactagtagtatcaccattact 291

Qy     214 cgtacttctatcactccgcgtccgtgcccgtactcttctcgtactgaaactaactacatc 273
           |||| |||||| | |   | |   | |     || ||   | |   ||||    || |
Db    292 actactactatcattactattaccaccaccattactactatcattactactactaccacc 351

Qy     274 tgcgtta 280
           | |||
Db    352 accatta 358


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Job time: 4807 sec
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